

# Under voltage relay GRV8-□UV□ series

## Instruction Manual



### General

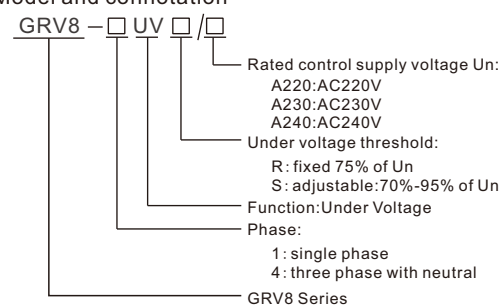
#### ■Applications

-Product is used for highly fluctuating inductive load such as Air Conditioning system in Industrial and commercial establishments. It protects the system equipment and load from sudden under voltage fluctuations..

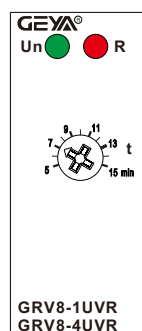
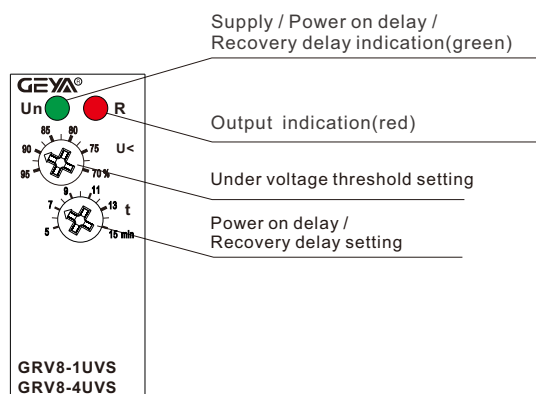
#### ■Function Features

- Controls its own supply voltage(True RMS measurement).
- Measuring frequency range:45Hz-65Hz.
- Voltage measurement accuracy<1%.
- Relay status is indicated by LED.
- 1-MODULE,DIN rail mounting.

#### ■Model and connotation



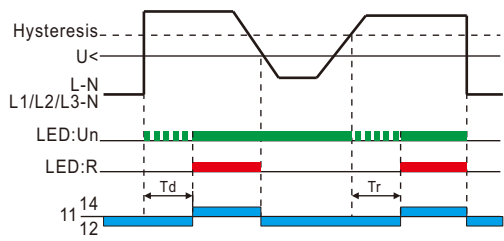
### Panel Diagram



### Technical parameters

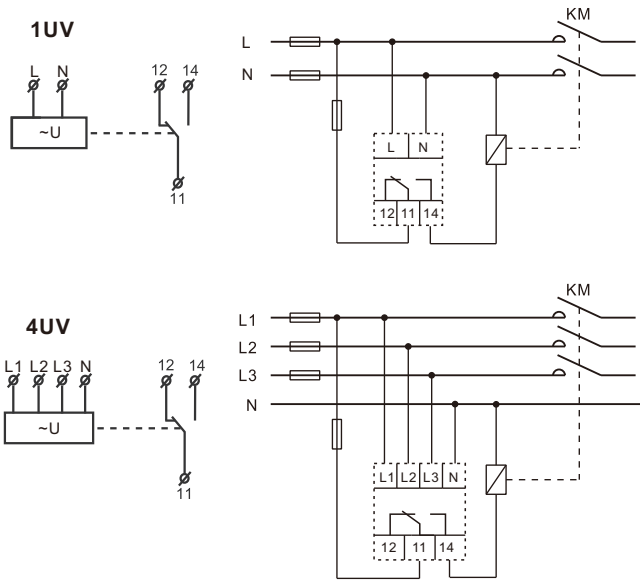
| Item                             | 1UV                                                        | 4UV        |
|----------------------------------|------------------------------------------------------------|------------|
| Function                         | Under voltage                                              |            |
| Monitoring terminals             | L-N                                                        | L1-L2-L3-N |
| Supply terminals                 | L-N                                                        | L1-N       |
| Rated supply voltage(Un)         | 220V/230V/240V                                             |            |
| Rated supply frequency           | 45Hz-65Hz                                                  |            |
| Under voltage threshold          | R:fixed 75% of Un; S:70%-95%of Un                          |            |
| Trip delay time(Tu)              | 0.1s                                                       |            |
| Hysteresis                       | 5V                                                         |            |
| Measurement error                | ≤1%                                                        |            |
| Power on delay time(Td)          | Adjustable: 5min-15min                                     |            |
| Recovery delay time(Tr)          | Adjustable: 5min-15min                                     |            |
| Konb setting accuracy            | 10% of scale value                                         |            |
| Supply indication                | green LED                                                  |            |
| Output indication                | red LED                                                    |            |
| Output                           | 1×SPDT                                                     |            |
| Current rating                   | 10A/ AC1                                                   |            |
| Switching voltage                | 250VAC/24VDC                                               |            |
| Mechanical life                  | 1×10 <sup>7</sup>                                          |            |
| Electrical life(AC1)             | 1×10 <sup>5</sup>                                          |            |
| Operating temperature            | -20°C to +55°C (-4°F to 131°F)                             |            |
| Storage temperature              | -35°C to +75°C (-22°F to 158°F)                            |            |
| Mounting/DIN rail                | Din rail EN/IEC 60715                                      |            |
| Protection degree                | IP40 for front panel/IP20 terminals                        |            |
| Operating position               | any                                                        |            |
| Overvoltage category             | III.                                                       |            |
| Pollution degree                 | 2                                                          |            |
| Max.cable size(mm <sup>2</sup> ) | solid wire max.1×2.5or 2×1.5/with sleeve max.1×2.5(AWG 12) |            |
| Tightening torque                | 0.8Nm                                                      |            |
| Dimensions                       | 90×18×64mm                                                 |            |
| Weight                           | 63g,65g                                                    |            |
| Standards                        | EN 60255-1,IEC60947-5-1                                    |            |

## Functions Diagram

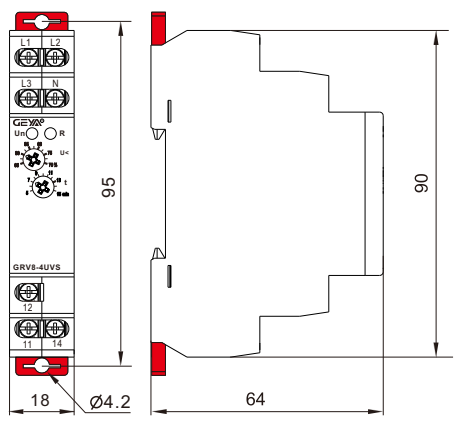


Td: Power on delay  
Tr: Undervoltage recovery delay  
Td = Tr

## Wiring Diagram



## Dimensions(mm)



**Disposal of Electrical Waste**  
All electrical waste should be disposed of in compliance with current WEEE regulations.



**Caution**  
The products must be installed by qualified electricians. All and any electrical connections of the product shall comply with the appropriate safety standards.